AN

INTERNSHIP REPORT

ON

BLOOD BANK MANAGEMENT SYSTEM PROJECT REPORT

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Date: 2025/05/07

BLOOD BANK MANAGEMENT SYSTEM WITH ORGANIZATION

ABSTRACT

The main objective of the "Blood Bank management System" all the details in the Blood Bank'sprocess. This project has some tasks to maintain the Blood Bank through computerization. Using this blood bank system people can search blood group available which they are needed. They check it on using our blood bank management website. If in case blood group is not available in blood bank they can also contact numbers of the persons who has the same blood group he is need. And he can request the person to done the blood for saving someone life.

The Project describes the smart Blood Bank management system. This report will help you to know in deep the actual work that has been done as a team work. The main objective of this application is to automate the complete operations of the blood bank. They need to maintain hundreds of thousands of records. Also searching should be very faster, so they can find required details instantly. Main objective is to create a system which helps them to complete their work faster in simple way by using computer not the oldest way which is used paper. Also our project contains updated information and many things else.

The project consists of a central repository containing various blood deposits available along with associated details. These details include blood type, storage area and date of storage. These details help in maintaining and monitoring the blood deposits. The project is an online system that allows checking weather required blood deposits of a particular group are available in the blood bank. Moreover the system also has added features such as patient name and contacts, blood booking and even need for certain blood group is posted on the website to find available donors for a blood emergency. This online system is developed on PHP platform and supported by an MYSQL database to store blood and user specific details.

CHAPTER 1

1. INTRODUCTION

1.1 ABOUT THE PROJECT

The main aim of developing this system is to provide blood to the people who are in need of blood. The number persons who are in need of blood are increasing in large number day by day. Using this system user can search blood group available in the city and he can also get contact number of the donor who has the same blood group needs. In order to help people who are in need of blood, this Online Blood Bank management system can be us effectively for getting the details of available blood groups and user can also get contact number of the blood donors having the same blood group and within the same city. So if the blood group is not available in the blood.

The project blood bank management system is known to be a pilot project that is designed for the blood bank to gather blood from various sources and distribute it to the needy people who have high requirements for it. The software is designed to handle the daily transactions of the blood bank and search the details when required. It also helps to register the details of donors, blood collection details as well as blood issued reports. The software application is designed in such a manner that it can suit the needs of all the blood bank requirements in the course of future.

This blood bank management system is an online website so it is easily available to everyone. Then a person to donate blood he has to register to the system. Donor registration is very easy, to get register to the system have to fill up registration form. After submitting the registration form he can create username and password. Donor have to give information like blood group, contact details etc. donor can also change his account information when he wants using his username and password.

1.2 REQUIREMENT SPECIFICATION

1.2.1 HARDWARE REQUIREMENT

Processor	:	Pentium Core 2 Duo
RAM	:	1 GB DDR2 RAM
Hard Disk	:	80 GB
Key Board	:	Standard 104 Keys
Monitor	:	14’ color monitor
Mouse	:	USB Optical Mouse

1.2.2 SOFTWARE REQUIREMENT

Operating System	:	MS-Windows 7.
Front End	:	PHP
Back End	:	MYSQL

1.2.3 FEATURES OF PHP

PHP

PHP is a widely-used, open source scripting language used for scripts that are executed on the server and it is freeware. It is a server side scripting language used to develop attractive and dynamic web pages. PHP is widely-used, free, and efficient alternative to competitors such as Microsoft's ASP. We make available with database used with PHP is MYSQL – which is also an open source which is an added advantage. PHP's simple programming style, we attempt to design in a way that enables anyone with basic programming knowledge to learn and shift to never-ending opportunity available.

PHP started out as a small open source project that evolved as more and more people found out how useful it was. RasmusLerdorf unleashed the first version of PHP way back in 1994.

- PHP is a recursive acronym for "PHP: Hypertext Preprocessor".

- PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire ecommerce sites.

- It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server.

- PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time.

- PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time.

- PHP is forgiving: PHP language tries to be as forgiving as possible.

- PHP Syntax is C-Like.

COMMON USES OF PHP

- PHP performs system functions, i.e. from files on a system it can create, open, read, write, and close them.
- PHP can handle forms, i.e. gather data from files, save data to a file, through email you can send data, return data to the user.
- You add, delete, and modify elements within your database through PHP.
- Access cookies variables and set cookies.
- Using PHP, you can restrict users to access some pages of your website.
- It can encrypt data.

CHARACTERISTICS OF PHP

Five important characteristics make PHP's practical nature possible −

- Simplicity
- Efficiency
- Security
- Flexibility
- Familiarity

In order to develop and run PHP Web pages three vital components need to be installed on your computer system.

- Web Server − PHP will work with virtually all Web Server software, including Microsoft's Internet Information Server (IIS) but then most often used is freely available Apache Server
- Database − PHP will work with virtually all database software, including Oracle and Sybase but most commonly used is freely available MySQL database.
- PHP Parser − In order to process PHP script instructions a parser must be installed to generate HTML output that can be sent to the Web Browser. This tutorial will guide you how to install PHP parser on your computer.

Before you proceed, it is important to make sure that you have a proper environment setup on your machine to develop your web programs using PHP.

If this displays a page showing your PHP installation related information, then it means you have PHP and Web server installed properly. Otherwise you have to follow given procedure to install PHP on your computer.

Apache Configuration

If you are using Apache as a Web Server then this section will guide you to edit Apache Configuration Files.

PHP.INI File Configuration

The PHP configuration file, php.ini, is the final and most immediate way to affect PHP's functionality.

Windows IIS Configuration

To configure IIS on your Windows machine you can refer your IIS Reference Manual shipped along with IIS.

Escaping to PHP

The PHP parsing engine needs a way to differentiate PHP code from other elements in the page. The mechanism for doing so is known as 'escaping to PHP'. There are four ways to do this.

HTML tags

- HTML tags are used to mark-up HTML elements *f*
- HTML tags are surrounded by the two characters < and > *f*
- The surrounding characters are called angle brackets *f*
- HTML tags normally come in pairs like and *f*
- The first tag in a pair is the start tag, the second tag is the end tag *f*
- The text between the start and end tags is the element content
- HTML tags are not case sensitive, means the same as

FuelPHP

FuelPHP is a simple, flexible, community driven PHP 5 web framework. It was born out of the frustrations people have with the current available frameworks and developed with support from a community of developers. FuelPHP is extremely portable, works on almost any server and prides itself on clean syntax.

CakePHP

CakePHP is an open-source web framework. It follows the model–view–controller (MVC) approach and is written in PHP, modeled after the concepts of Ruby on Rails, and distributed under the MIT License.

CakePHP uses well-known software engineering concepts and software design patterns, such as convention over configuration, model–view–controller, active record, association data mapping, and front controller.

FEATURES of PHP

It is most popular and frequently used worldwide scripting language, the main reason of popularity is; It is open source and very simple.

- Simple
- Faster
- Interpreted
- Open Source
- Case Sensitive
- Simplicity
- Efficiency
- Platform Independent
- Security
- Flexibility

Simple

It is very simple and easy to use, compare to other scripting language it is very simple and easy, this is widely used all over the world.

Interpreted

It is an interpreted language, i.e. there is no need for compilation.

Faster

It is faster than other scripting language e.g. asp and jsp.

Open Source

Open source means you no need to pay for use php, you can free download and use.

Platform Independent

PHP code will be run on every platform, Linux, UNIX, Mac OS X, Windows.

Case Sensitive

PHP is case sensitive scripting language at time of variable declaration. In PHP, all keywords (e.g. if, else, while, echo, etc.), classes, functions, and user-defined functions are NOT case-sensitive.

Introduction of SQL

Introduction The Structured Query Language (SQL) is the language of databases. SQL was, is, and will stay for the foreseeable future the database language for relational database servers such as IBM DB2, Microsoft SQL Server, MySQL, Oracle, Progress, Sybase Adaptive Server, and dozens of others. SQL supports a small but very powerful set of statements for manipulating, managing, and protecting data stored in a database. This power has resulted in its tremendous popularity. Almost every database server supports SQL or a dialect of the language. Currently, SQL products are available for every kind of computer, from a small handheld computer to a large server, and for every operating system, including Microsoft Windows, Mac and many UNIX variations.

Database

A database is a structured collection of data that is used by the application systems of some given enterprise, and that is managed by a database management system. For the purpose of this course, think of a database as a collection of tables which are connected to each other.

IT Learning Programme (ITLP) in the University of Oxford offers a course on how to design a database. This course is a pre-requisite to this course. However, if you did not attend the database designing course, please read the following paragraphs. As we mentioned, a database is a collection of tables. Each table is similar to a spreadsheet table in which each row is called a record and each column is called a field.

SQL

Structured Query Language (SQL) is a relational database language which allows you to create, delete, access and manipulate databases. The following is a list of the main operations that can be formulated with SQL:

- Creating new databases
- Deleting a database
- Creating new tables in a database
- Deleting tables from a database
- Creating and removing users (database access control)
- Executing queries against a database o retrieving data from a database o inserting records in a database o updating records in a database o deleting records from a database
- Creating stored procedures in a database
- Setting permissions on tables and procedures
- Creating relationships between tables

MySQL

MySQL is a Relational Database Management System ("RDBMS"). It is used by most modern websites and web-based services as a convenient and fast-access storage and retrieval solution for large volumes of data.

A simple example of items which might be stored in a MySQL database would be a site-registered user's name with associated password (encrypted for security), the user registration date, and number of times visited, etc.

MySQL can also be accessed using many tools. It can be easily communicated with via PHP (PHP Hypertext Preprocessor), a scripting language whose primary focus is to manipulate HTML for a webpage on the server before it is delivered to a client's machine. A user can submit queries to a database via PHP, allowing insertion, retrieval and manipulation of information into/from the database.

MySQL

MySQL can be downloaded from http://dev.mysql.com/downloads/. There are also several MySQL management tools which can be downloaded and installed to allow the manipulation of MySQL. These tools mainly provide an interface to operate on MySQL. Many of these tools are free and provide an easy configuration of MySQL with PHP, e.g., XAMPP, WampServer, AMPPS. Another free MySQL management system is MySQL workbench. It provides database administrators and developers an integrated environment for database design and modelling, SQL development, database administration, database migration. In this course we will be using XAMPP because it is straightforward to install and use.

XAMPP

XAMPP is a freely available software package which integrates distributions for Apache web server, MySQL, PHP and Perl into one easy installation. If you wish to set up a web server on your home computer, this is the recommended route. We will be using XAMPP for the purposes of this course. The teacher will guide through the process of installing XAMPP in the class.

CHAPTER 2

2. SYSTEM ANALYSIS

2.1 EXSITING SYSTEM

The operation of the blood bank still now is maintained in the manual system. The operation is tedious, time consuming and space consuming. It creates room for errors as the data is entered manually by the persons. It includes the risk of the documents being lost over years and maintenance of the records is difficult. The data recorded during testing or while acquiring the details of different aspects of blood bank management system is not so accurate and precise. Maintaining the stock of blood and the daily transactions without computerization also poses a challenge.Entering the details about the blood groups, members, addresses etc and tracking the database is complicated when the details are maintained manually. This makes the maintenance of schedule erroneous.

2.1.1 DISADVANTAGES

- Does not keep track of big data.
- It is time consuming
- It leads to error prone results
- It consumes lot of manpower to better results
- It lacks of data security
- Retrieval of data takes lot of time
- Percentage of accuracy is less
- Reports take time to produce
- Verification of data such as retrieved data, collected data, etc are tedious

2.2 PROPOSED SYSTEM

Using this bank management system people can register himself or herself who want to donate blood. To register in the system they have to enter their contact information like address mobile number etc. This blood bank management system is an online website so it is easily available to everyone. Then a person to donate blood he has to register to the system. Donor registration is very easy, to get register to the system have to fill up registration form. After submitting the registration form he can create username and password. Donor have to give information like blood group, contact details etc. donor can also change his account information when he wants using his username and password.Requests for the blood components are received from patients. With the request they bring the blood sample of the patient. Requests can be received from other hospital for their stock requirements.And here our system work, whenever a person need blood he get information of the person who has the same blood group he needs.

2.2.1 ADVANTAGES

- Completely menu-driven & used-friendly.
- Provides faster and efficient information processing.
- Separate tables are used to store separate information.
- Adding, selecting, updating, editing can be easily done.
- Complete reports are attached to this project.
- The main advantage is user friendly.
- The system should provide necessary security features to maintain the records of officials.
- Helps people find blood donors in times of need.

CHAPTER 3

SYSTEM DESIGN AND DEVELOPMENT

3.1 FILE DESIGN

This system contains the menus for various kinds of operations. Menus and Files are created for displaying the information about Remote monitoring System. This system also contains the command buttons as part of the user interface.

Menu driven programming is very easy to access the programs. In such a way the system is developed.

This system contains the following menus:

- Donor Register
- Collection Register
- Serology Register
- Cross Matching Register
- Issue Register
- Test Register
- Instrument Register
- Blood Group Register
- Test Report
- Collection Report
- Issue Report

3.2 INPUT DESIGN

The input design process is to design the input needs into a machine-oriented format. The object of input design is to create an input layout that is easy to follow user friendly and to avoid operator errors. In accurate data cause most common errors in data processing made by data entry operators. The help of error message can enter the required and formatted date by the user. So you are design the inputted design to simply entered format. The Formatted input entries such as edit mask, radio button, and drop down data window help the user to enter the data very easily without much knowledge of the product. Create the forms like donor, test register, serology. Using the buttons on save, delete, update, clear etc.

Input facilities the entry of data into the computer system. Input design involves the selection of the best strategy for getting data into the computer system at the right time and as accurately as possible. This is because the most difficult aspect of input design in accuracy .The use of well-defined documents can encourage users to record data accurately without omission. Input data are collected and organized into group of similar data once identified appropriate input media are selected for processing.

Input design is the process of converting user originated to a computer-based format. In the system design phase, the expanded data flow diagram identifies logical data stores, sources and destination. A system flow chart specifies master file (database) transaction files and computer programs.

The main objective of input design is to,

- Select a suitable input and data entry method
- Reduce input volume
- Design attractive data entry screens
- Use validation checks to reduce input errors
- Design required source documents
- Develop effective input controls.

The Menu based product helps even the native user work with the product. The success is designs in such a way to help the user to get the information whenever necessary. In this project we uses these types of inputs,

- id, name, address, occupation, gender, father name, dob, etc
- Using buttons like submit, cancel, edit, update, etc, no, donor id, name, date of collection, no. of bags, etc , , patient name, date of register, blood group, etc, lab no, instrument name, description

  - Donor Register
    - Donor id,
    - donor name,
    - address,
    - blood group,
    - general appearance,
    - pulse, etc.
  - Collection Register
    - donor id,
    - date of collection,
    - bag no,
    - date of expiry
    - no. of bags.
  - Serology Register
    - serology id,
    - patient name,
    - date of register,
    - reference Dr.,
    - Hemoglobin,
    - VDRL,
    - Blood Group,
    - Rh Factor,

- HIV ½ Elisa Test, etc..

- Cross Matching Register
  - Serology No,
  - Patient Name,
  - Blood Group
  - Donor Id, etc

- Issue Register
  - Issue No.,
  - Issue date,
  - Bag No., etc,

- Test Register
  - Hemoglobin,
  - Total W.B.C. Count,

- Instrument Register
- Blood Group Register

3.3 OUTPUT DESIGN

Output Design generally refers to the result and information that are generated by the system for many end-user, output is the main reason for developing the system and the basis on which they evaluate the usefulness of the application.

The objective of a system finds its shape in terms of the output. The analysis of the objective of a system leads to determination of output. Output of a system can face various forms. The most common are report, screen display, printed forms, graphical drawing etc., the output also vary in terms of their contents frequency, timing & format. The users of the output from a system are the justification for its existence. If the outputs are inadequate in any way, the system is the itself is adequate. The basic requirement of output are that it should be accurate, timely and appropriate, in terms of content, medium and layout for its intended purpose.

The output design contains the following reports

- Test Report
- Collection Report
- Issue Report

When designing output, system analysis most accomplish thing like, to determine what information to be present, to decide whether to display or print the information and select and output medium and to decide how to distribute the output to intended recipients. External outputs are those destinations will be outside the organization and which require special attention as they project the image of the organization. Internal outputs are those whose destination is within the organization. It is to be carefully designed, as they are the user main interface with the system.

3.4 DATABASE DESIGN

Database is the storage media where the data given by the user are stored as such or processed and stored. The system accepts data from the database to generate required information for the user database determines the purpose and exact application of the system. While designing decided which facts are to be stored in it and divide the subjects & create tables for each subject and determine the relationship between the data in one table to other. Verify the data by entering the sample records to produce the results.

- Data Integration
- Data integrity
- Data independence

DATA INTEGRATION

In a database, information from several files are coordinated, accessed operated upon as through it is in a single file. Logically, the information are centralized, physically, the data may be located on different devices, connected through data communication facilities.

DATA INTEGRITY

Data integrity means storing all data in one place only how each application to access it. This approach results in more consistent information, one update being sufficient to achieve a new record status for all applications, which use it. This leads to less data redundancy; data items need not be duplicated; a reduction in the direct access storage requirement.

DATA INDEPENDENCE

Data independence is the insulation of application programs from changing aspects of physical data organization. This objective seeks to allow changes in the content and organization of physical data without reprogramming of applications and to allow modifications to application programs without reorganizing the physical data.

The tables needed for each module were designed and the specification were designed and specification of each and every column was given based on the records and details collected during record specification of each and every column was given based on the records details collected during record inspection during system study.

3.5 SYSTEM DEVELOPMENT

3.5.1 MODULE DESCRIPTION

Master Module:

Master Module contains the information about the Donors Register, Collection Register, Serology Register, Cross Matching Register, Issue Register, Test Register, Instrument Register and Blood Group Register.

Donor Register:

This is the sub module is used to store the information about the Donor details. It contains the following information: Donor id, donor name, address, blood group, general appearance, pulse, etc.

Collection Register:

This module is used to store the information about the collection register such as donor id, date of collection, bag no, date of expiry and no. of bags.

Serology Register

This module is used to store the serology information which includes the serology id, patient name, date of register, reference Dr., Hemoglobin, VDRL, Blood Group, Rh Factor, HIV ½ Elisa Test, etc..

Cross Matching Register:

This module is used to store the various information about the cross matching such as Serology No., Patient Name, Blood Group, Donor Id, Donor's Blood group and Cross matching compatibility.

Issue Register:

Issue Register is used to store the blood bags issued details, such as Issue No., Issue date, Bag No., Serology No., Patient Name, Blood Group, Hospital Name, Issue By and No. of bags.

Test Register:

This module is used to store the information about Blood Test, such as Lab No., Patient Name, Doctor's Reference, Date of Test, Hemoglobin, Total W.B.C. Count, Differential Count, Neutorphils, Lymphocytes, E.S.R ½ Hr, E.S.R 1 Hr, Plasmodia Vivax, Plasmodium Falciparum, etc.

Instrument Register:

This module is used to store the Instrument details such as Instrument No., Instrument Name and Description.

Blood Group Register:

This module is used to store the blood group information such as blood group name and description.

Test reports:

This module is used to display the information about the Lab Test, with below details, Lab No., Patient Name, Doctor's Reference, Date of Test, Hemoglobin, Total W.B.C. Count, Differential Count, Neutorphils, Lymphocytes, E.S.R ½ Hr, E.S.R 1 Hr, Plasmodia Vivax, Plasmodium Falciparum, etc

Collection Register Report

This module shows the information about the collection register such as donor id, date of collection, bag no, date of expiry and no. of bags.

Issue Register's Report

This module shows the information about the blood bags issued details, such as Issue No., Issue date, Bag No., Serology No., Patient Name, Blood Group, Hospital Name, Issue By and No. of bags.

CHAPTER 4

TESTING AND IMPLEMENTATION

SYSTEM TESTING

Testing is the process of detecting errors. Testing performs a very critical role for quality assurance and for ensuring the reliability of software.The results of testing are used later on during maintainence also Psychology of Testing.

The aim of testing is often to demonstrate that a program works by showing that it has no errors.The basic purpose of testing phase is to detect the errors that may be present in the program.Hence one should not start testing with the intent of showing that a program works,but the intent should be to show that a program doesn't work.

Testing is the process of executing a program with the intent of finding errors.

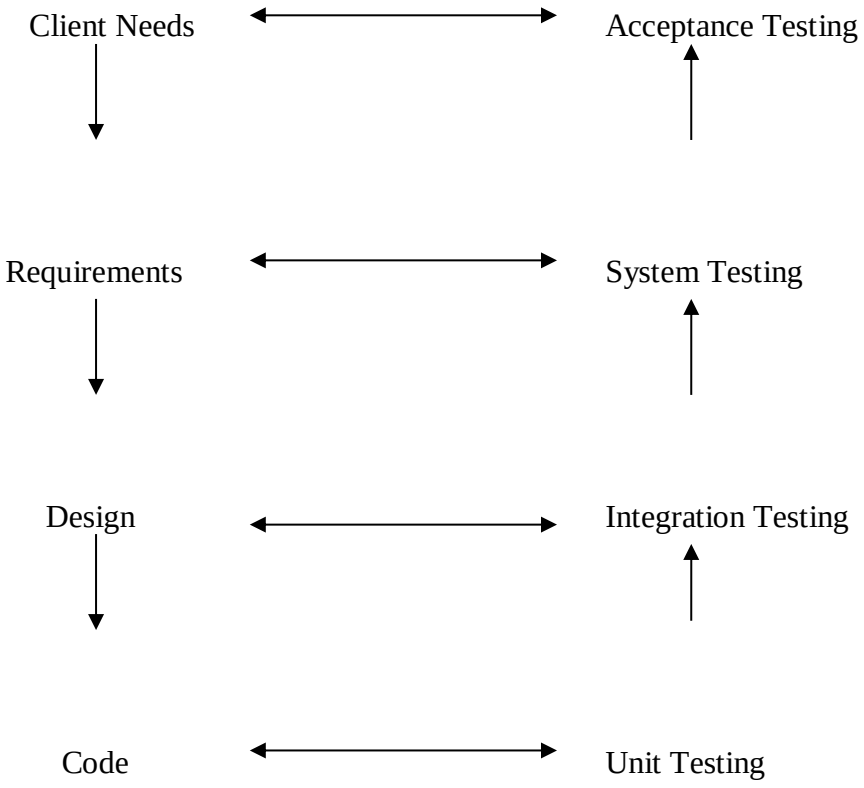
Testing Objectives:

The main objective of testing is to uncover a host of errors, systematically and with minimum effort and time. Stating formally, we can say,

- Testing is a process of executing a program with the intent of finding an error.
- A successful test is one that uncovers an as yet undiscovered error.
- A good test case is one that has a high probability of finding error, if it exists.
- The tests are inadequate to detect possibly present errors.
- The software more or less confirms to the quality and reliable standards.

Levels Of Testing

In order to uncover the errors present in different phases we have the concept of levels of testing.The basic levels of testing are



A series of testing is done for the proposed system before the system is ready for the user acceptance testing.

The steps involved in Testing are:

- **Unit Testing:**

Unit testing focuses verification efforts on the smallest unit of the software design**,** the module**.** This is also known as "Module Testing"**.** The modules are tested separately**.** This testing carried out during programming stage itself**.** In this testing each module is found to be working satisfactorily as regards to the expected output from the module**.**

- **Integration Testing:**

Data can be grossed across an interface**;** one module can have adverse efforts on another**.** Integration testing is systematic testing for construction the program structure while at the same time conducting tests to uncover errors associated with in the interface. The objective is to take unit tested modules and build a program structure**.** All the modules are combined and tested as a whole**.** Here correction is difficult because the isolation of cause is complicate by the vast expense of the entire program. Thus in the integration testing stop**,** all the errors uncovered are corrected for the text testing steps**.**

- **System testing:**

System testing is the stage of implementation that is aimed at ensuring that the system works accurately and efficiently for live operation commences. Testing is vital to the success of the system. System testing makes a logical assumption that if all the parts of the system are correct, then goal will be successfully achieved.

- **Validation Testing:**

At the conclusion of integration testing software is completely assembled as a package, interfacing errors have been uncovered and corrected and a final series of software tests begins**,** validation test begins**.** Validation test can be defined in many ways**.** But the simple definition is that validation succeeds when the software function in a manner that can reasonably expected by the customer. After validation test has been conducted one of two possible conditions exists.

One is the function or performance characteristics confirm to specifications and are accepted and the other is deviation from specification is uncovered and a deficiency list is created. Proposed system under consideration has been tested by using validation testing and found to be working satisfactorily.

Output Testing:

After performing validation testing, the next step is output testing of the proposed system since no system could be useful if it does not produce the required output in the specified format. Asking the users about the format required by them tests the outputs generated by the system under consideration. Here the output format is considered in two ways, one is on the screen and other is the printed format. The output format on the screen is found to be correct as the format was designed in the system designed phase according to the user needs. For the hard copy also the output comes as the specified requirements by the users. Hence output testing does not result any corrections in the system.

- **User Acceptance Testing:**

User acceptance of a system is the key factor of the success of any system. The system under study is tested for the user acceptance by constantly keeping in touch with the prospective system users at the time of developing and making changes wherever required.

- **Test Data:**

Taking various kinds of test data does the above testing. Preparation of test data plays a vital role in the system testing after preparing the test data the system under study is tested using the test data. While testing the system by using the test data errors are again uncovered and corrected by using above testing steps and corrections are also noted from the future use.

- **Testing:**

The testing done here was System Testing–checking whether the user requirements were satisfied. The code for the new system has been written completely using JSP as the coding language, HTML as the interface for front-end designing and Java Script for validating the client-side applications. The new system has been tested well with the help of the users and all the applications have been verified from every nook and corner of the user.

Although some applications were found to be erroneous these applications have been corrected before being implemented. The flow of the forms has been found to be very much in accordance with the actual flow of data.

SYSTEM IMPLEMENTATION

Once the system has been developed, the system has to be tested and if no bugs found it is to be implemented.

Implementation is process of converting a new or revised system design into an operational one. The first task is implementation planning that is deciding on the methods and time scale to be adopted.

The proper implementation involves conversion of existing clerical files to computer media and hence these files as they are get converted. Then the actual changeover from the existing system to the new system takes place.

The changeover plays a vital role, which checks the developed tool for the following requirements, and then only the developed tool will be accepted by the users.

The software has been checked with sample data. The changes being made are as per the user requirements and will run in parallel with the manual system to find out any discrepancies. The users also have been apprised of the ways of handling the software, as a part of training the user personnel.

During the software-testing phase each module of software is thoroughly tested for bugs and for accuracy of output. The system developed is very user-friendly and the detailed documentation is also given to the user as online help wherever necessary. The implementation phase normally ends with the formal test involving all the components.

The entire system was developed using the PHP, HTML, JavaScript, Personal Web Server, and MYSQL as back end. The HTML is used to design the web page. The Personal Web Server

is used to understand the client's request and to send response to them. The Javascripts are used for client-side validations so that the user can enter only appropriate input in the input fields. The MYSQL is the back end tool where the database resides.

Hence the design of the entire system is user-friendly and simple the implementation has been quite easy.

Creating a user interface which is both easily navigableand effective will be a difficult challenge for us. Thebasic and primary constraint will be that we aredeveloping an application for web platform. Themajor constraint will be resolution and limited screensize as the application. The otherconstraint regarding web will be processingpower and limited memory. Our project is meant to beresponsive management of functions which deals withtremendous information regarding the hospitals, bloodbanks, donors, patients, stock management and will bedeveloped with efficiency.

The final and important phase in system life cycle is the installation of the new system. The term installation has different meaning, ranging from the conversion of basic application a complete replacement of a computer system.

The procedure, however are virtually the same. Installation is the process of converting a new system into an operational one. It involves user training and successful running of the developed system. In the installation phase the user and the system manuals are prepared handed over to the user to operate the developed system.

The objective of each manual is the same but the target customers may be different. The user manual is aimed at those who would be using the system but not interested in technical information about the insides of the system, or implementation of login within the system.

The information that they are interested are-

- Scope of the system
- Flow and links across the programs and modules
- Validation done within the program
- The actual usage of the system
- The contents of the user manual are the following:
- Menu map and Disk usage
- Usage description
- Back up procedures
- Security measures
- Input's and output's formats
- Do's and don'ts

The system manual is aimed at those persons who would ne maintain, changing and enhancing system and also the people who are interested in the implementation of the logic within the system.

CHAPTER 5

CONCLUSION

A Blood Bank Management System is a software product suite designed to improve the quality and management of blood bank in the areas of health process analysis and activity-based costing. Public Blood Bank Management System enables you to develop your organization and improve its effectiveness and quality of work. Managing the key processes efficiently is critical to the success of the pharmacy. Public Blood Bank Management System helps you manage your processes. A Public Blood Bank Management System provides all process management tool elements: modeling, analysis, and simulation. Documentation though an important part of a blood bank management, is a nonproductive exercise for the intellectual human being, whose ability lies in core areas of excellence. Hence a systematic approach to the way documents are managed, can transform your pharmacy retailing resources to its highest utility and advantage.

Future Enhancement:

- We have already entered the age of Information Technology, where all the paper work / manually managed files are about to finish, now with the help of this user friendly software all the files stored in the computer can be very well formatted.
- With little more modifications it will become the good software for Blood Bank.
- The present Blood Bank´ project may be further developed for more complex transactions and to meet the requirements of modern day dynamic System Operation New options and their respective implementation may be done for this purpose.
- As there was a little number of contact person's information given, some people may face difficulty in getting blood fast.
- So i like to gather more information regarding the contact persons in other cities as well as villages and will provide much more services for the people and help everyone with humanity.

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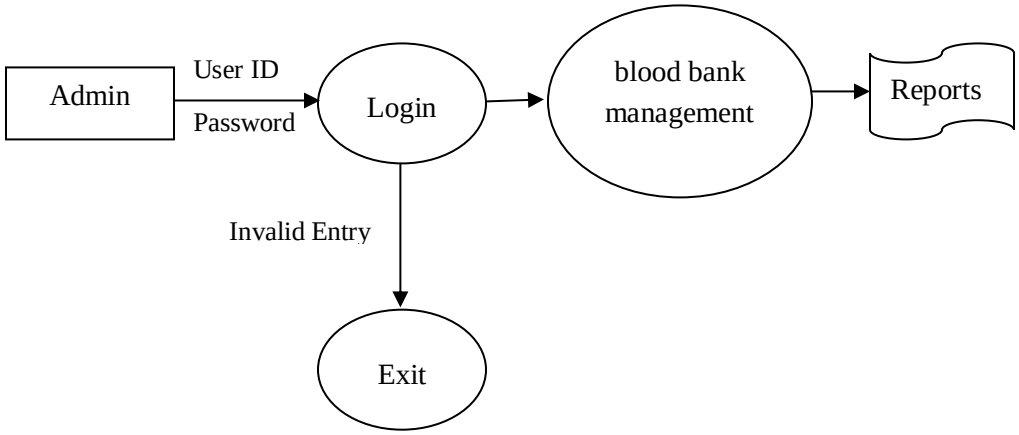
APPENDIX

DATAFLOW DIAGRAM

LEVEL 0



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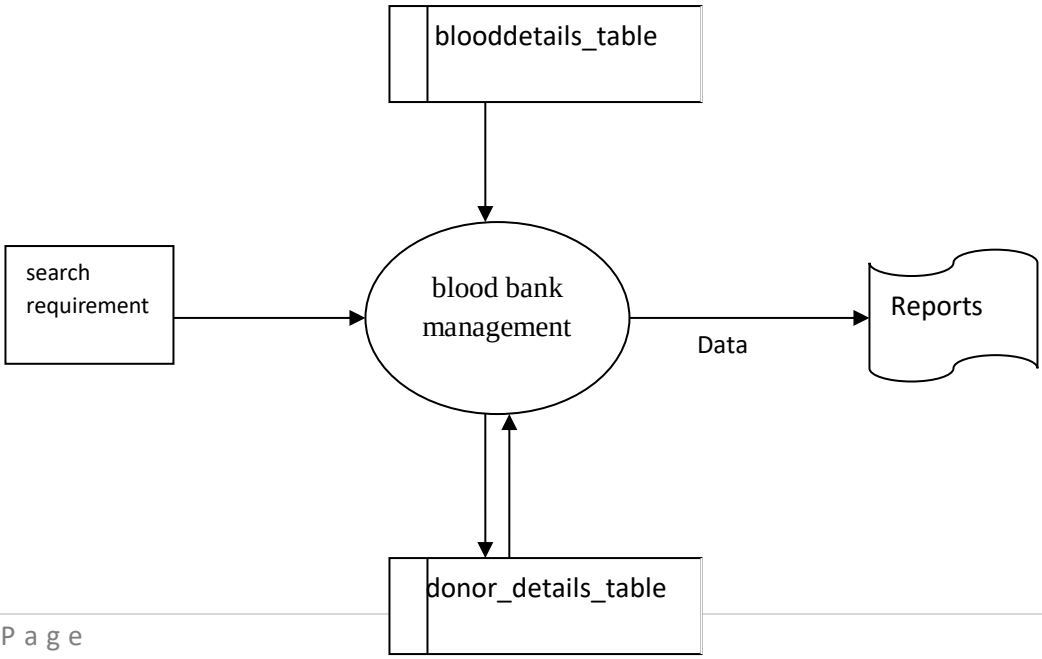

B) TABLE STRUCTURES

TABLE NAME : BloodGroup

Primary Key : BloodGrp

Field Name	Data Type	Size
BloodGrp	Char	50
Description	Char	250

TABLE NAME : CollectionReg

Primary Key : BagId

Field Name	Data Type	Size
BagId	Number	2
Did	Number	2
DOC	Date/Time	8
DOE	Date/Time	8
NoOfBags	Number	2
BalanceBag	Number	2

TABLE NAME : CrossMatchingReg

Primary Key : CMID

Field Name	Data Type	Size
CMID	Number	2
SerologyId	Number	2
DonorId	Number	2
CMCompatible	Text	250

TABLE NAME : DonorReg

Primary Key : Did

Field Name	Data Type	Size
Did	Number	2
DonorName	Text	100
FHName	Text	100
Gender	Text	1
Address	Text	250
Occupation	Text	100

ContactNo	Text	15
Marital	Text	10
BloodGroup	Text	10
Dob	Date/Time	8
Weigh	Number	2
BP	Text	50
GenApp	Text	50
Temperature	Text	50
SkillLesion	Text	50
Pulse	Text	50
RhType	Text	50
Remarks	Text	50

TABLE NAME : InstrumentReg

Primary Key : InsId

Field Name	Data Type	Size
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InsName	Text	50
Description	Text	250

TABLE NAME : IssueReg

Primary Key : IssueID

Field Name	Data Type	Size
IssueID	Number	2
IDate	Date/Time	8
BagNo	Number	2
SerologyNo	Number	2
HospitalName	Text	50
IssuedBy	Text	100
NoOfBags	Number	2

TABLE NAME : SerologyReg

Primary Key : Sid

Field Name	Data Type	Size
SId	Number	2
Patient	Text	50
DOR	Date/Time	8
Age	Number	2
Ref	Text	50
Hemoglobin	Text	50
VDRL	Text	50
BloodGrp	Text	50
RhFactor	Text	50
HIV	Text	50
HB	Text	50
HCV	Text	50
HIVWestern	Text	50

TABLE NAME : TestReg

Primary Key : LabId

Field Name	Data Type	Size
LabId	Number	2
TestDate	Date/Time	8
PatientName	Text	50
Age	Number	2
Ref	Text	50
HG	Text	50
WBC	Text	50
Nuetra	Text	50
Lympho	Text	50
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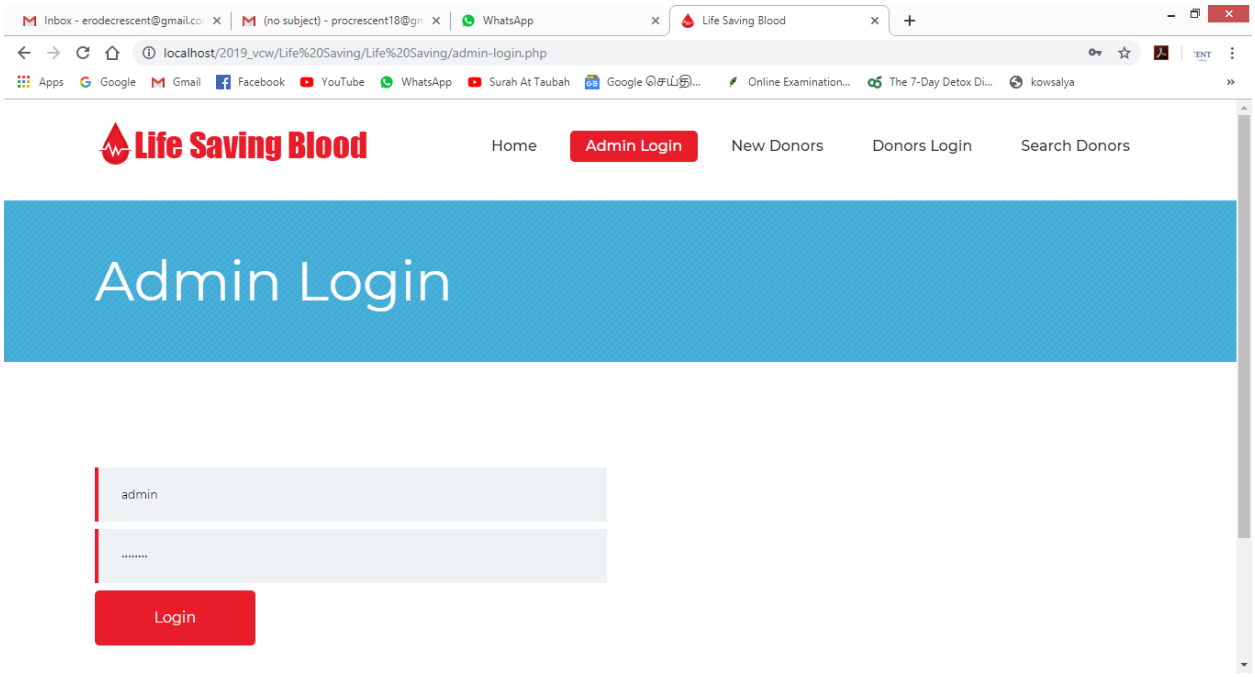
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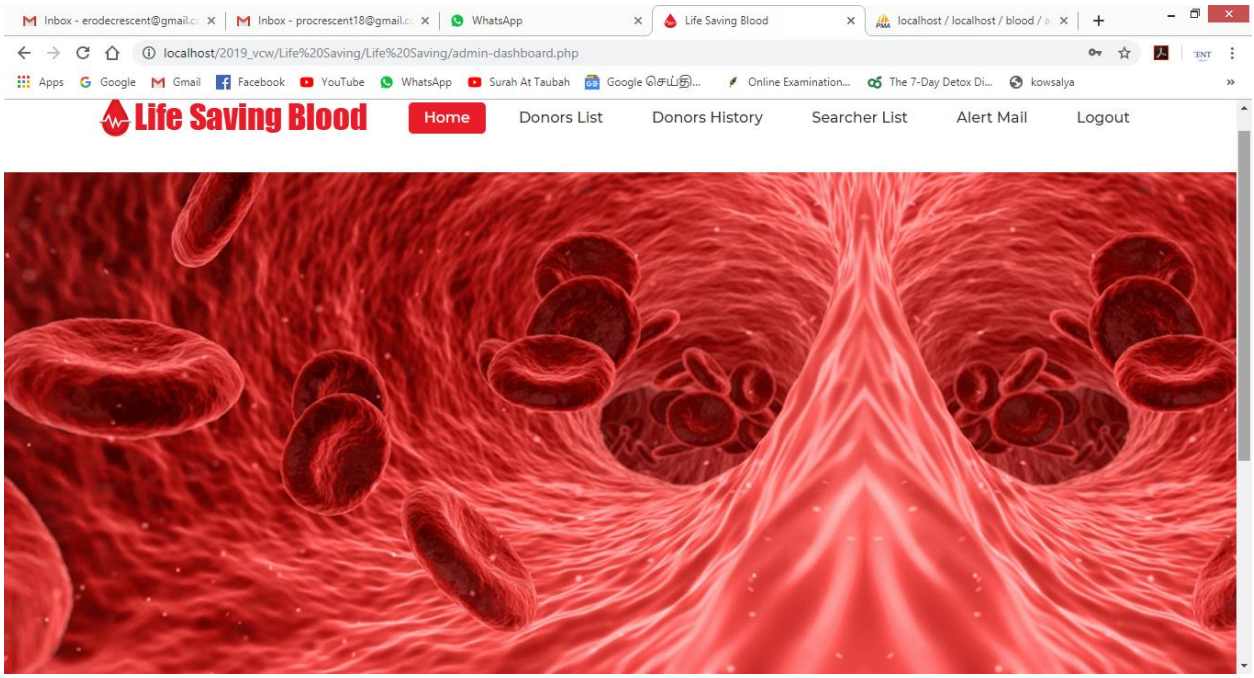
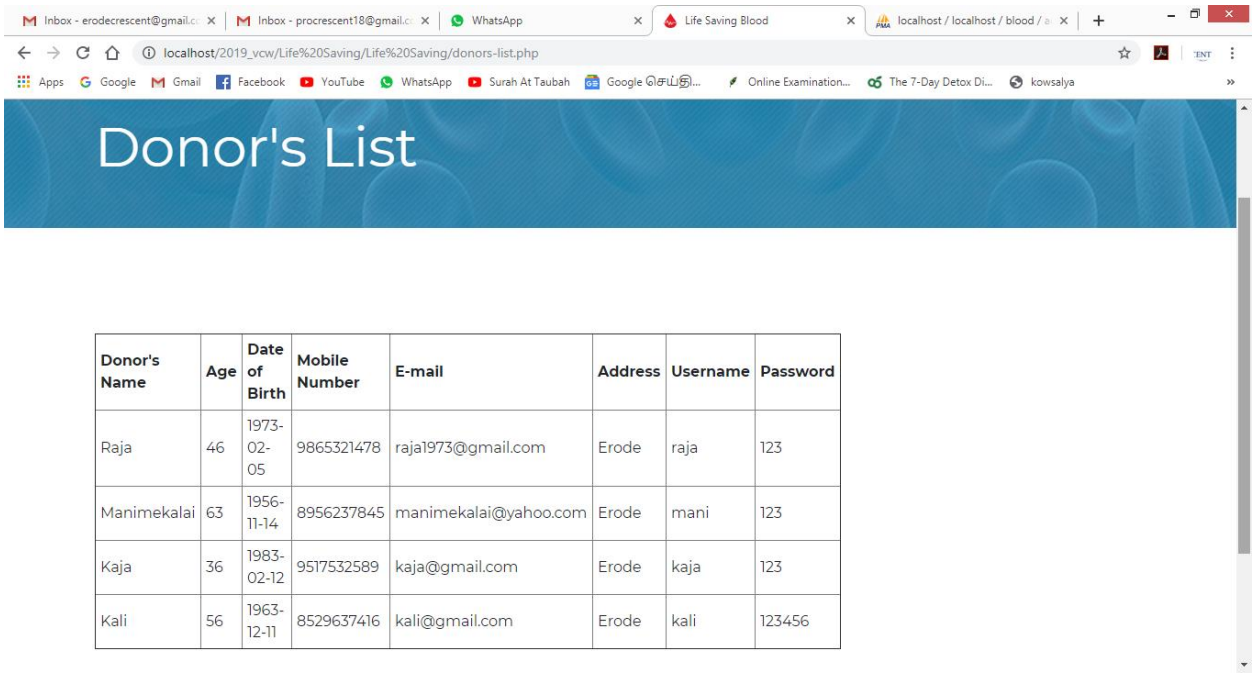
MAIN WINDOW FOR ADMIN:





Donor's Name	Age	Date of Birth	Mobile Number	E-mail	Address	Username	Password
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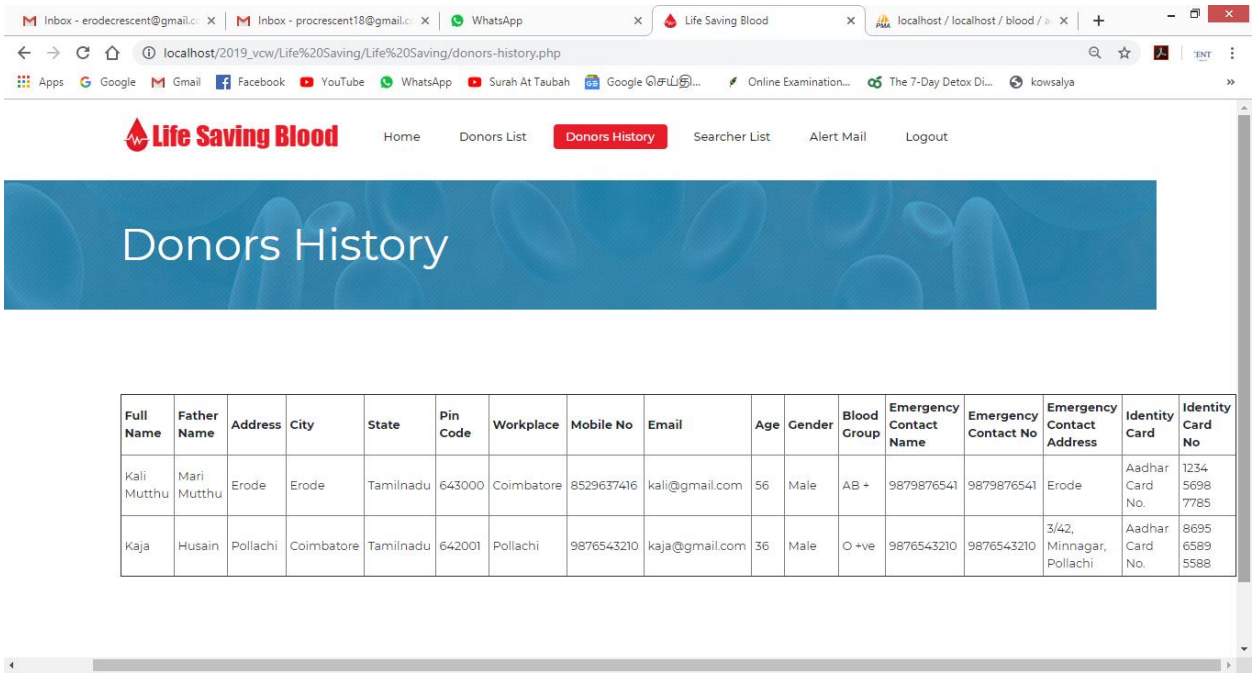
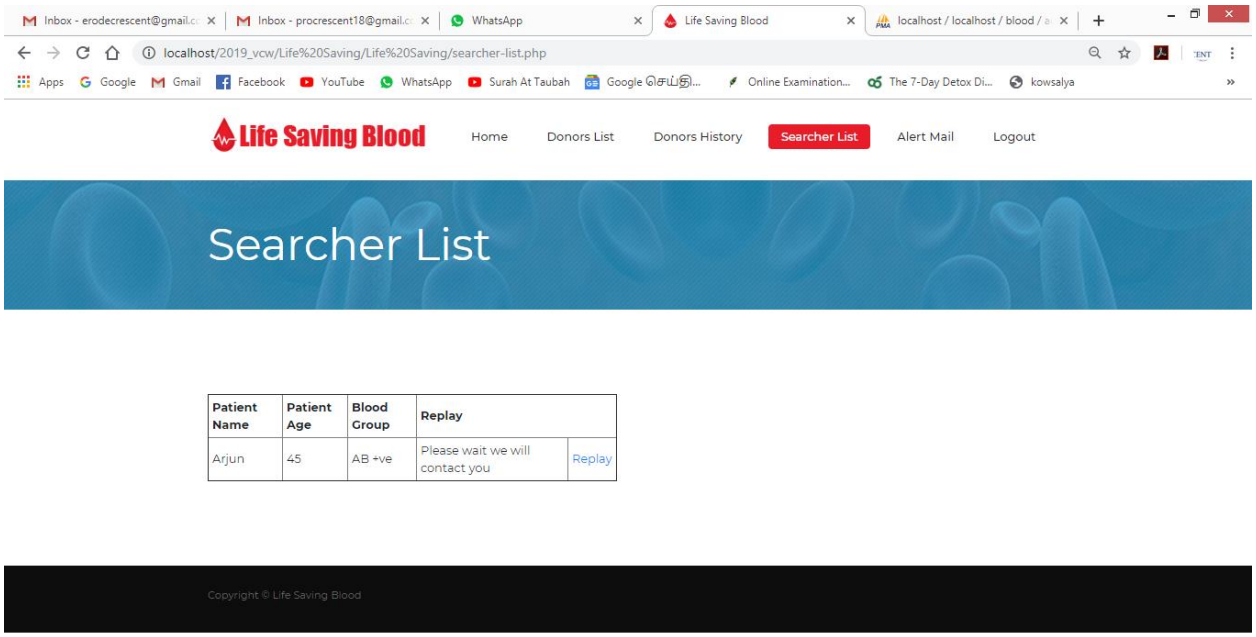
Manimekalai	63	1956-11-14	8956237845	manimekalai@yahoo.com	Erode	mani	123
Kaja	36	1983-02-12	9517532589	kaja@gmail.com	Erode	kaja	123
Kali	56	1963-12-11	8529637416	kali@gmail.com	Erode	kali	123456



Full Name	Father Name	Address	City	State	Pin Code	Workplace	Mobile No	Email	Age	Gender	Blood Group	Emergency Contact Name	Emergency Contact No	Emergency Contact Address	Identity Card	Identity Card No
Kali Mutthu	Mari Mutthu	Erode	Erode	Tamilnadu	643000	Coimbatore	8529637416	kali@gmail.com	56	Male	AB +	9879876541	9879876541	Erode	Aadhar Card No.	1234 5698 7785
Kaja	Husain	Pollachi	Coimbatore	Tamilnadu	642001	Pollachi	9876543210	kaja@gmail.com	36	Male	O +ve	9876543210	9876543210	3/42, Minnagar, Pollachi	Aadhar Card No.	8695 6589 5588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Donors History
Searcher List
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Replay
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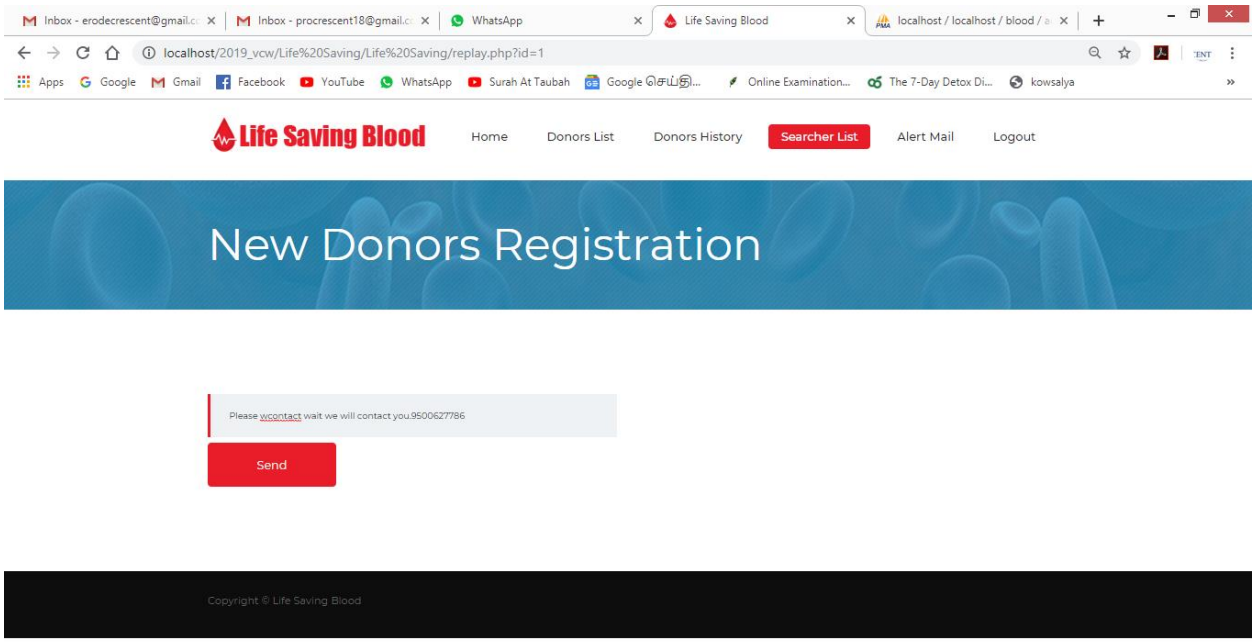
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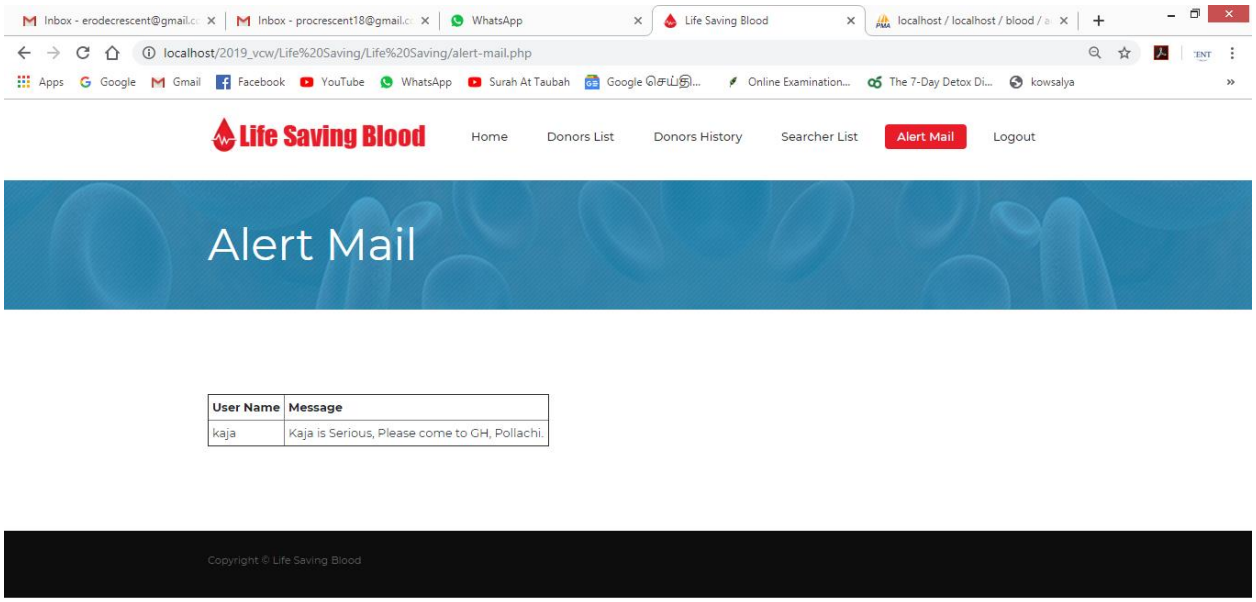
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Donors List
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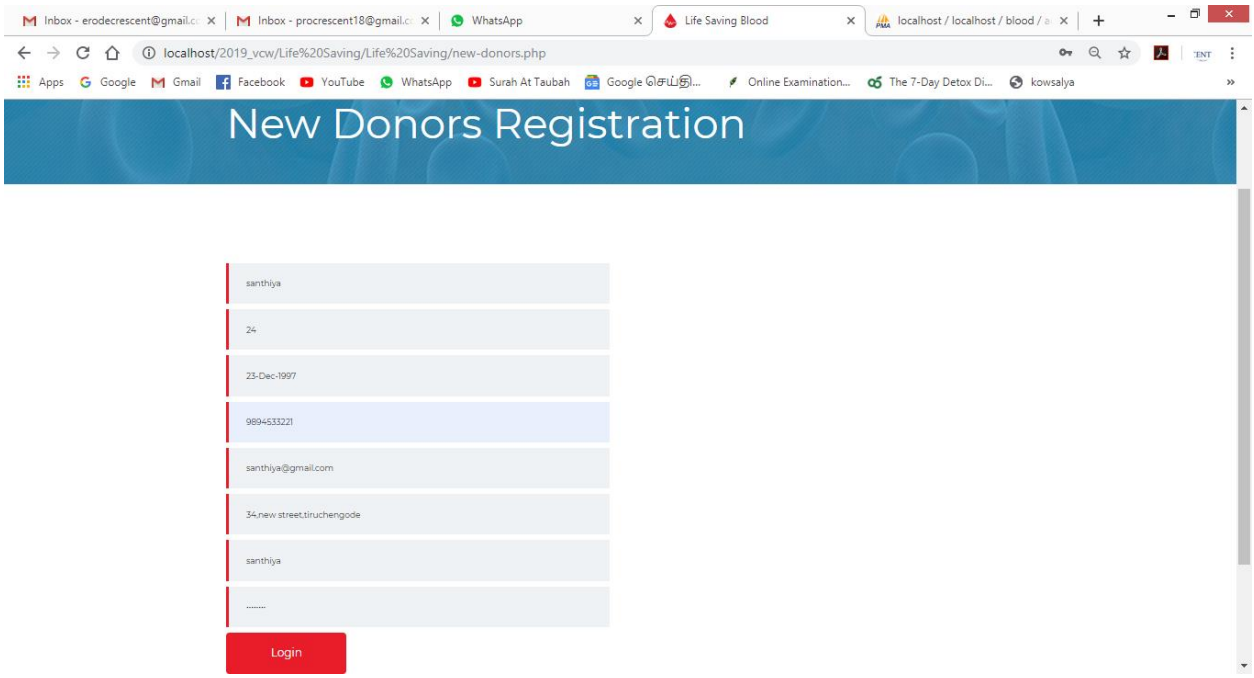

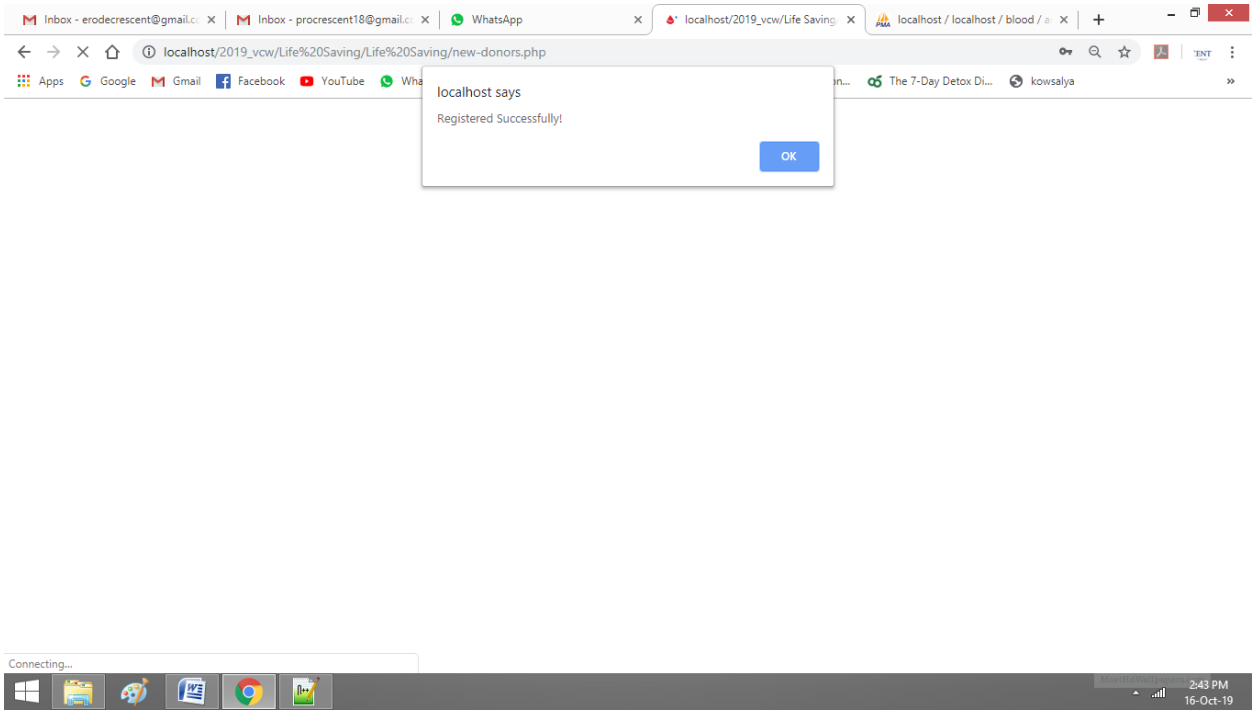
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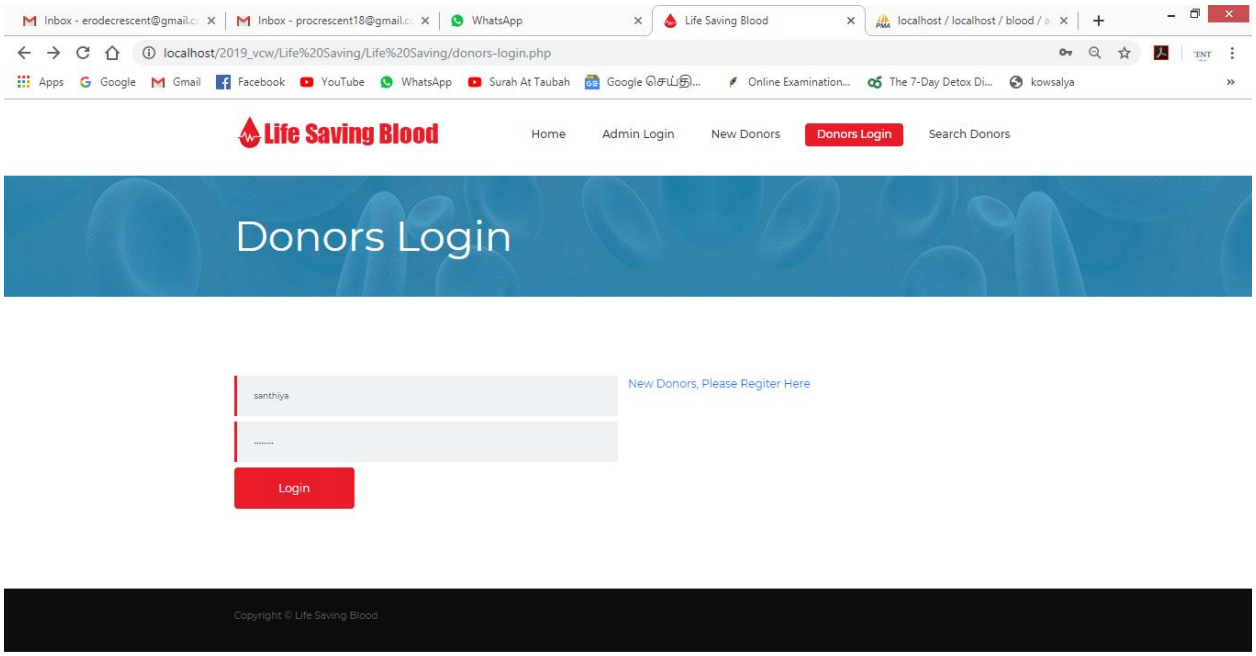
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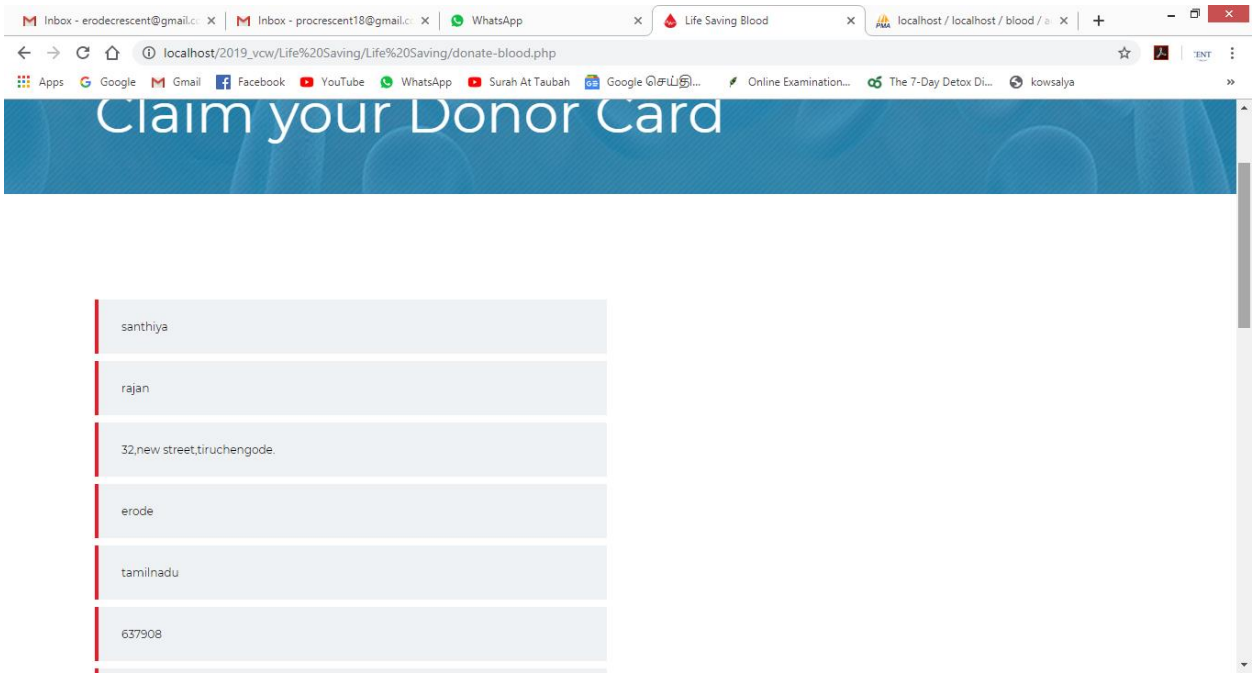
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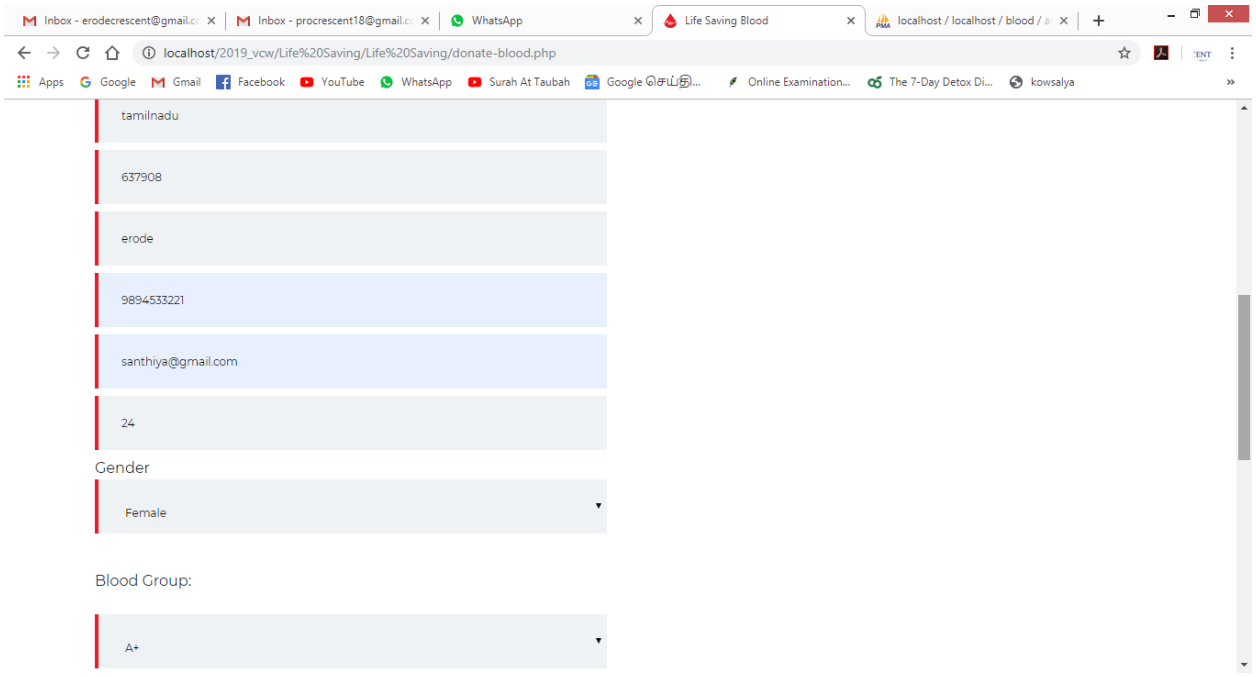
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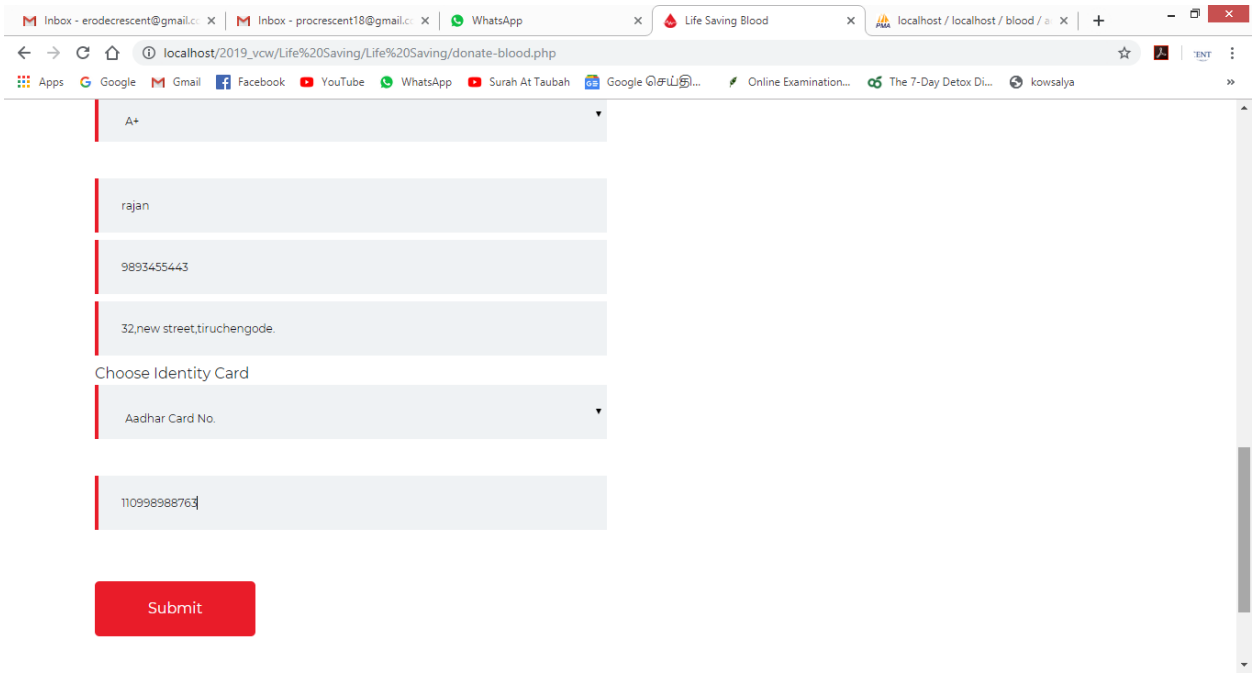
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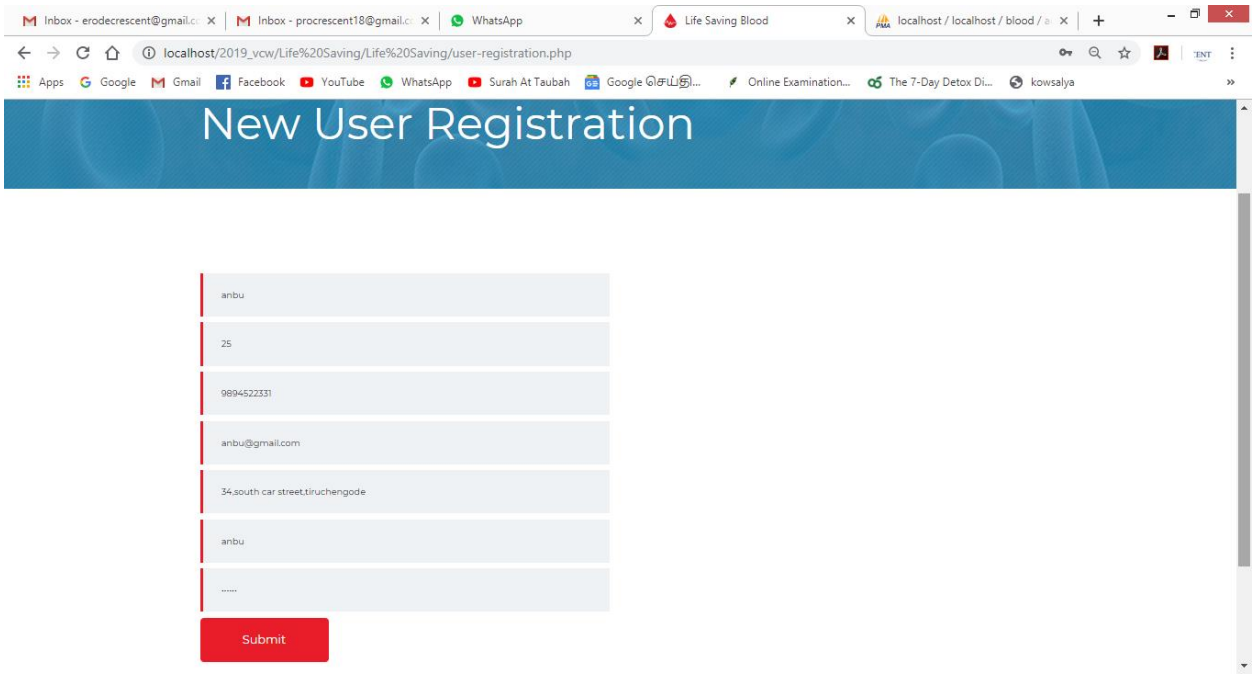
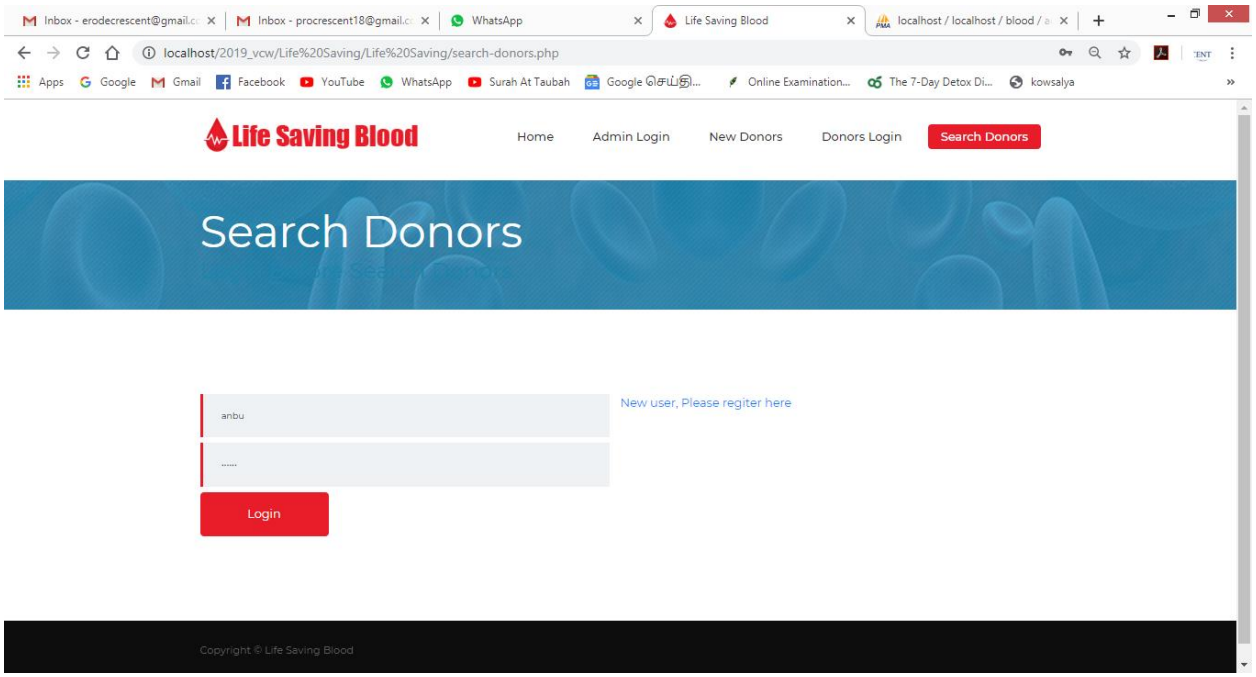
Submit

Blood Search user registration

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New Donors
Donors Login
Search Donors
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New user, Please regiter here
Login
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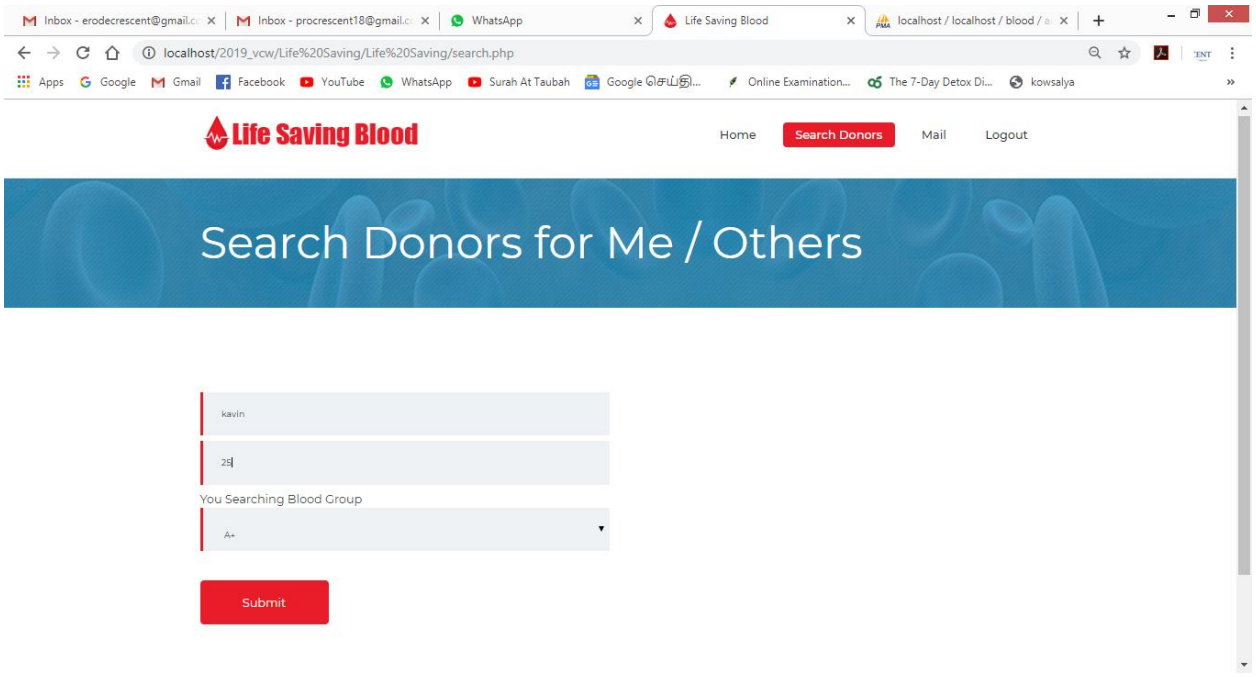
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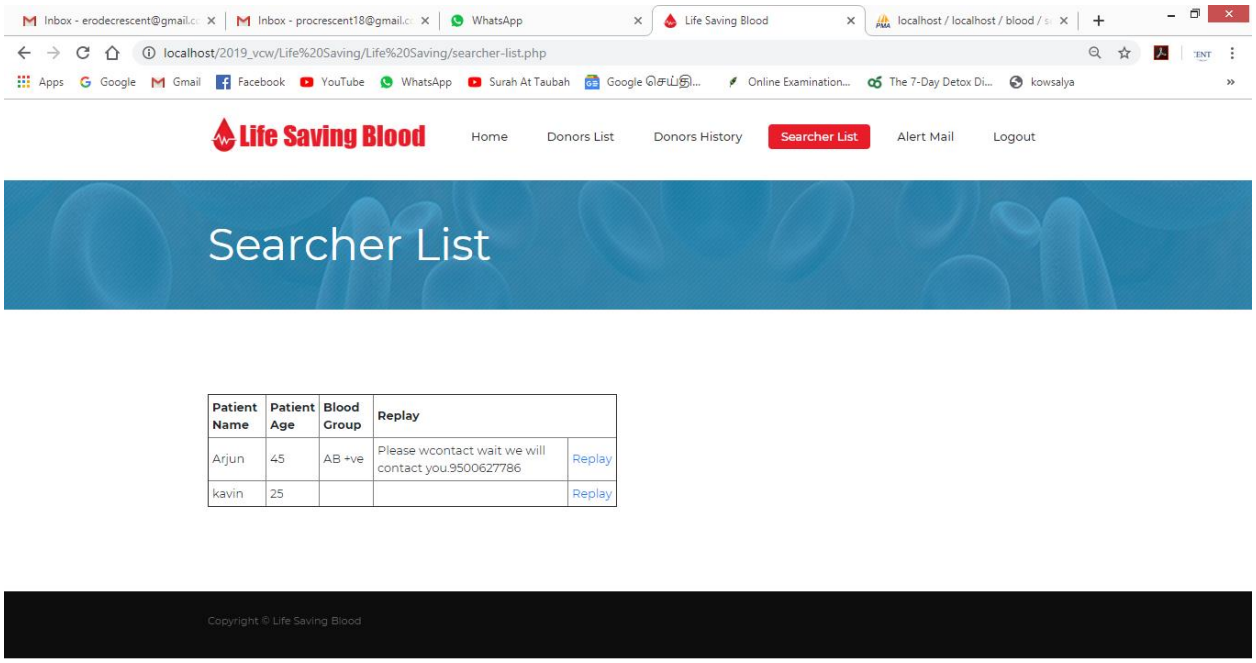
Logout
Search Donors for Me / Others
kavin
25
You Searching Blood Group
A+
Submit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Patient Age
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AB +ve
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